

Attorney Docket # 4100-77CPA2



AF/GP 2854  
Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Eduard HOFFMANN et al.

Serial No.: 08/856,944

Filed: May 15, 1997

For: A Carrying Sleeve For Printing And Transfer  
Forms And A Process For Production Of Such A  
Carrying Sleeve

Examiner: K. Asher  
Group Art: 2854

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June 20, 2000  
(Date of Deposit)

Klaus P. Stoffel

Name of applicant, assignee or Registered Representative

Signature

June 20, 2000  
Date of Signature

Board of Patent Appeals and Interferences  
Washington, D.C. 20231

APPEAL BRIEF

SIR:

Applicants hereby request a one-month extension of the original shortened statutory response period set in the Advisory Action of February 9, 2000. A check in the amount of \$110 in payment of the government fee for a one-month extension of time is enclosed herewith.

On March 20, 2000, appellants appealed from the final rejection of claims 1-17.

What follows is appellants brief as required by 37 C.F.R. § 1.192.

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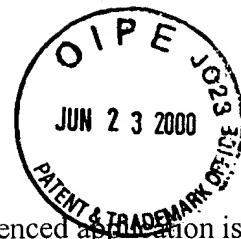
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I. REAL PARTY IN INTEREST



The real party in interest in the above-referenced application is:

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Germany

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II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences of which appellants are aware regarding the above references application.

III. STATUS OF CLAIMS

Claims 1-17 are pending and are subject to the present appeal.

Claims 1 and 2 are rejected under 35 USC 103(a) over U.S. Patent No. 5,488,903 to Köbler, et al. (Köbler, et al.) in view of U.S. Patent No. 4,964,338 to Fantoni (Fantoni), U.S. Patent No. 1,690,684 to Johnson (Johnson), U.S. Patent No. 4,913,048 to Tittgemeyer (Tittgemeyer), and in view of acknowledged prior art under 35 USC 102(f) or (g).

Claim 3 is rejected under 35 USC 103(a) over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of U.S. Patent No. 4,183,788 to Fromson, et al. (Fromson, et al.) and U.S. Patent No. 5,281,511 to Gerhardt (Gerhardt).

Claim 4 is rejected under 35 USC 103(a) as being unpatentable over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of Tittgemeyer.

Claim 5 is rejected under 35 USC 103(a) as being unpatentable over Köbler, et al. in view of the secondary references as applies to claim 1, and further in view of U.S. Patent No. 5,468,568 to Kühn, et al. (Kühn, et al.) and U.S. Patent No. 5,093,180 to Morgan (Morgan).

Claim 6 is rejected under 35 USC 103(a) as being unpatentable over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of each of Kühn, et al. and Gerhardt.

Claim 7 is rejected under 35 USC 103(a) as being unpatentable over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of each of Kühn, et al., U.S. Patent No. 5,289,769 to Lewis (Lewis) and U.S. Patent No. 5,347,927 to Berna, et al. (Berna, et al.).

Claim 8 is rejected under 35 USC 103(a) as being unpatentable over Köbler, et al. in view of Johnson, Fantoni, Tittgemeyer and in view of an acknowledgement of prior art under 35 USC 102(f) or (g).

Claims 9, 10 and 11 are rejected under 35 USC 103 as being unpatentable over Köbler, et al. in view of the secondary references as applied to claim 8, and further in view of U.S. Patent No. 5,147,999 to Dekumbis, et al. (Dekumbis, et al.).

Claims 12 and 13 are rejected under 35 USC 103 as being unpatentable over Köbler, et al. in view of Fantoni, Johnson, Fromson, et al., Gerhardt, Tittgemeyer and in view of an acknowledgement of prior art under 35 USC 102(f) or (g).

Claims 14 and 15 are rejected under 35 USC 103(a) as being unpatentable over Köbler, et al. in view of Fantoni, Kühn, et al., Morgan, Johnson, Tittgemeyer and in view of an acknowledgement of prior art under 35 102(f) or (g).

Claim 16 is rejected under 35 USC 103 as being unpatentable over Köbler, et al., Johnson, Fantoni and each of Kühn, et al., Tittgemeyer, Gerhardt and in view of an acknowledgement of prior art under 35 USC 102(f) or (g).

Claim 17 is rejected under 35 USC 103(a) as being unpatentable over Köbler, et al. in view of Johnson, Fantoni, U.S. Patent No. 5,208,158 to Fadner, et al. (Fadner, et al.), Morgan, U.S. Patent No. 4,963,404 to Jenkins (Jenkins), Tittgemeyer and in view of an acknowledgement of prior art under 35 USC 102(f) or (g).

#### **IV. STATUS OF AMENDMENTS AFTER FINAL REJECTION**

An amendment after final rejection was filed on January 24, 2000. An advisory action was issued on February 9, 2000, entering the amendment and maintaining the rejections of the claims.

#### **V. SUMMARY OF THE INVENTION**

Appellants' invention is directed to a metal carrying sleeve for continuous printing and transfer forms. The carrying sleeve consists essentially of a rectangular thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that the two edges of the flat sheet face one another (see page 7, lines 3-6 of the specification). A metal weld seam 2 permanently connects together only the facing edges of the sheet (see page 7, line 6 and Figures 1 and 3). The weld seam has an initial crowned configuration (see page 7, lines 18-19 and Figure 3). The weld carrying

sleeve has a homogeneous, continuous and uniform outer circumferential metal surface including the weld seam (see page 7, lines 12-22). The foregoing is brought out in claim 1.

Claim 2 depends from claim 1 and further limits the same by defining the thin-walled flat sheet to be made of aluminum (see page 8, line 6).

Claim 3 depends from claim 1 and further limits the same by defining the circumferential surface, including the weld seam, to be chemically roughened and anodized. A photosensitive coat being provided on the roughened and anodized surface (see page 8, lines 1-7).

Claim 4 depends from claim 1 and further limits the same by defining a water-conducting coat to be provided on the outer surface (see page 8, lines 8-11).

Claim 5 depends from claim 1 and further limits the same by defining a copper engraved coat to be provided on the entire outer surface including the weld seam (see page 4, lines 3-4, page 5, line 9 and page 8, lines 16-18).

Claim 6 depends from claim 1 and further limits the same by defining an endless rubber coat covering the entire outer surface including the seam (see page 8, lines 20-24).

Claim 7 depends from claim 1 and further limits the same by defining the carrying sleeve to be configured to directly carry a flexible printing form for flexographic printing (see page 4, lines 8-9).

Claim 8 is an independent claim drawn to a process for producing a carrying sleeve for printing and transfer forms, in which process a base plate is cut from thin-walled sheet metal drawn from a roll to a size corresponding to a circumference breadth of a printing cylinder. The base plate is bent into a cylindrical form so that the edges face one another (see Figure 2 and page 7, lines 7-11). The edges of the base plate are then welded together with a weld seam having an outwardly directed crown 3 (see Figure 3). The crown and the outer surface are then processed to

form a homogeneous, uniform continuous outer surface formed of the outer sleeve surface and the weld seam so that form at variable continuous printing is possible on the entire continuous surface (see page 8, lines 12-24).

Claim 9 depends from claim 8 and further limits the same by defining the crown to be formed by welding filler materials (see page 7, lines 23-24).

Claim 10 depends from claim 8 and further limits the same by defining the crown to be formed using targeted protective gas feeds (see page 7, lines 23-24).

Claim 11 depends from claim 8 and further limits the same by defining the crown to be formed by deposit welding following an initial welding of the base plate edges (see page 7, lines 23-24).

Claim 12 is an independent claim drawn to a process for producing an offset printing form by producing a carrying sleeve by cutting a base plate and bending the base plate so that two edges of the base plate face one another, and subsequently permanently connecting together the two edges of the base plate with the welded metal seam that has an outwardly directed crown 3. The crown and the outer surface of the sleeve are then processed by chemically roughening and anodizing the hollow cylindrical form at the base plate and then providing a photosensitive coating on the outer surface of the cylindrical form (see page 8, lines 1-7).

Claim 13 depends from claim 12 and further limits the same by defining the base plate to be made of aluminum (see page 8, line 6).

Claim 14 is an independent claim drawn to a process for producing a gravure printing form by producing a carrying sleeve by cutting a base plate from a thin walled sheet drawn from a roll and in flat state, and then bending the base plate into a desired cylindrical form so that the edges of the base plate face one another. The edges are permanently connected together by a

welded metal seam that has an outwardly directed crown. The outer surface of the sleeve and the crown to form a homogenous, continuous uniform outer surface. A metal coat is then applied to the outer surface and mechanically processed (see page 8, lines 16-19).

Claim 15 depends from claim 14 and further limits the same by defining the metal coat to include a copper alloy applied to the outer surface of the cylindrical form (see page 8, line 16).

Claim 16 is an independent claim drawn to a process for producing a transfer form by producing a carrying sleeve by cutting a base plate from a thin walled sheet metal drawn from a roll and in a flat state to a size corresponding to a circumference and breadth of a printing cylinder, bending the base plate into a desired cylindrical form and permanently connecting together the two facing edges of the base plate with a welded seam that has an outwardly directed crown. The crown and the outer surface are then processed to form a homogenous, continuous uniform outer surface. An endless rubber coating is then applied to the entire processed sleeve surface (see page 8, lines 1-24).

Claim 17 is an independent claim drawn to a process for producing a printing form wherein the carrying sleeve is produced as previously discussed and an endless ceramic coat is applied to the entire processed sleeve surface (see page 5, lines 12-13).

## **VI. ISSUES**

The following issues are presented for review:

1. Whether claims 1 and 2 are unpatentable Köbler, et al. in view of Fantoni, Johnson, Tittgemeyer and an acknowledgement of prior art under 35 USC 102(f) or (g).
2. Whether claim 2 is unpatentable over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of Fromson, et al. and Gerhardt.
3. Whether claim 4 is unpatentable over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of Tittgemeyer.
4. Whether claim 5 is unpatentable over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of Kühn, et al. and Morgan.
5. Whether claim 6 is unpatentable over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of each of Kühn, et al. and Gerhardt.
6. Whether claim 7 is unpatentable over Köbler, et al. in view of the secondary references as applied to claim 1, and further in view of each of Kühn, et al., Lewis and Berna, et al.

7. Whether claim 8 is unpatentable over Köbler, et al. in view of Johnson, Fantoni, Tittgemeyer and an acknowledgement of prior art under 35 USC 102(f) or (g).

8. Whether claims 9-11 are unpatentable over Köbler, et al. in view of the secondary references as applied to claim 8, and further in view of each of Dekumbis, et al.

9. Whether claims 12 and 13 are unpatentable over Köbler, et al. in view of Fantoni, Johnson, Fromson, et al., Gerhardt, Tittgemeyer and acknowledgement of prior art under 35 USC 102(f) or (g).

10. Whether claims 14 and 15 are unpatentable over Köbler, et al. in view of Fantoni, Kühn, et al., Morgan, Johnson, Tittgemeyer and an acknowledgement of prior art under 35 USC 102(f) or (g).

11. Whether claim 16 is unpatentable over Köbler, et al. in view of Johnson, Fantoni and each of Kühn, et al., Tittgemeyer, Gerhardt and an acknowledgement of prior art under 35 USC 102(f) or (g).

12. Whether claim 17 is unpatentable over Köbler, et al. in view of Johnson, Fantoni, Fadner, et al., Morgan, Jenkins, Tittgemeyer and an acknowledgement of prior art under 35 USC 102(f) or (g).

## **VII. GROUPING OF CLAIMS**

The claims stand and fall together.

## **VIII. ARGUMENT**

### **A. The References**

The Examiner cited 13 references in various combinations in rejecting the claims.

These references are as follows:

U.S. Patent No. 5,488,903 to Köbler, et al. discloses a registered device for a sleeve-shaped offset printing form, which register device is comprised of a weld seam on a sleeve which has an inwardly projecting portion that projects into a groove in a form cylinder.

U.S. Patent No. 4,964,388 to Fantoni, et al. discloses a method for mechanically joining the marginal portions of a blank of a printing plate in which a filler seam of self-hardening material is used.

U.S. Patent No. 1,690,684 to Johnson discloses a cylindrical member and a method for production thereof.

U.S. Patent No. 4,913,048 to Tittgemeyer discloses a method and apparatus for printing with a lithographic sleeve wherein the sleeve is made up of a plurality of layers.

U.S. Patent No. 4,183,788 to Fromson, et al. discloses for graining an aluminum base lithographic plate.

U.S. Patent No. 5,281,511 to Gerhardt discloses a process for producing an embossing dye.

U.S. Patent No. 5,468,568 to Kühn, et al. discloses a printing roller having a sleeve of thermally wound fiber reinforced thermoplastic and plasma sprayed coating of copper or copper alloy.

U.S. Patent No. 5,093,180 to Morgan discloses a printing roll having a surface with roughness of < 6 micro inches.

U.S. Patent No. 5,289,769 to Lewis discloses a method and apparatus for changing a printing sleeve.

U.S. Patent No. 5,347,927 to Burna, et al. discloses an anisotropic endless printing element having a number of layers.

U.S. Patent No. 5,147,999 to Dekumbis, et al. discloses a laser welding device.

U.S. Patent No. 5,207,158 to Fadner, et al. discloses a roller for use with a surface-scraping doctor blade to meter a fluid applied to the outer surface of the roller.

U.S. Patent No. 4,963,404 to Jenkins discloses a process for producing a coating product by plasma spraying in which the coating consists of ceramic fluorocarbon polymer.

## B. The Examiner's Rationale

In the final rejection of September 17, 1999, the Examiner summarized her rejection of the claims as follows:

"Initially, it is noted that applicants' disclosure as originally filed states that the use of a laser for the welding process to make the claimed device and in the method claimed is known prior art (page 7, paragraphs 2 and 3). Specifically, 'Figure 2 shows possible ways of producing the carrying sleeve 1 in a quasi-continuous fashion, as is currently known by those in the tube welding art. The welding process itself is carried out by a laser beam...The carrying sleeves may also be produced by means of the welding device known from DE43 11 078. The external surface of the welded carrying sleeve 1 is then processed to create a homogeneous, continuous outer surface. To carry out this surface processing, it is possible to use known production methods for smoothing a metal surface, such as turning, polishing or the like.' Further, applicants state that the processing is known prior art (page 8, paragraph 1). Specifically 'for use in offset printing as the carrying sleeve 1 for printing form, the entire sleeve surface, including the connection seam, in the present case a welded seam 2, is subsequently chemically roughened, anodized and provided with a final photosensitive coat, as is already known from the process steps during printing plate production. In respect to technical printing characteristics, this printing form sleeve is identical to conventional printing plates, except that this printing form sleeve permits continuous printing.' So, the sleeve is admitted known prior art and the method of making is admitted known prior art. Applicants' sole contribution being that such a plate, as produced, is used for continuous printing - page 8, lines 4-6. Therefore, the question before the Examiner is whether or not the prior teaches or renders obvious the use of a continuous metal sleeve for continuous printing. At the very least such as clearly taught by Tittgemeyer (U.S. Patent No. 4,913,048) who teaches endless, offset printing via an endless sleeve which is air mounted, that allows for endless printing because it has no interruption due to its seem. Given that Tittgemeyer is silent as to how the sleeve is formed, it would have been obvious to one of ordinary skill in the art to have looked to the prior art for guidance. Methods of forming continuous metal sleeves and such sleeves is acknowledged prior art by applicants, and is taught by the references relied upon. Köbler, et al. (U.S. Patent No. 5,488,903) teach welding metal seams together to form a continuous sleeve of a plate and gas expansion loading of such a formed sleeve on a form cylinder. Johnson (U.S. Patent No. 1,690,684) teaches typical welding processes including turning and machining to achieve a smooth, continuous final product. Fantoni, et al. (U.S. Patent No. 4,965,338) teach the provision of continuous plates via filling and/or adhesive joining to form completely continuous surfaces, where Köbler, et al. teach the functional equivalency of welding and adhesive connections (column 2, lines 58+). It is further noted that applicants have only separately argued the references relied upon by the Examiner which does not fairly or accurately address the rejections actually made, and hence renders applicants arguments

completely non-responsive. In summary the prior art teaches the use of continuous metal sleeves as plates and continuous offset printing. The prior art teaches welding a metal sheet together to form such a metal sleeve. The prior art teaches that the weld be concave so that the seam is completely filled. The prior art teaches finishing the weld seam by turning or machining so as to have a completely smooth continuous sleeve. The prior art teaches the use of chemicals to roughen, anodize, etc. the plate surface. The prior art teaches the use of laser to make the weld. The prior art teaches the disadvantage of a clamp or seam on a printing cylinder in offset printing. The prior art teaches the disadvantage of a clamp or seam on a printing cylinder in offset printing. Applicants have not claimed any feature or contribution to the art that non-obviously distinguishes over the prior art of record. Applicants have presented broad concept claims that are clearly not allowable over the prior art of record. Applicants have advanced no arguments or reasoning to distinguish over the prior art."

**C. The Section 103 Rejections of Independent Claims 1, 8, 12, 14, 16 and 17**

The present invention has the specific objective of improving on sleeve-shaped printing forms, as disclosed, for example, by Köbler, et al. so that they can be used for endless printing. The presently claimed invention accomplishes this objective by processing or working at least the crown region of the weld seam so that a homogenous, continuous and uniform outer circumferential surface is present on the carrying sleeve to permit continuous printing in spite of the presence of a weld seam.

Köbler, et al. provide absolutely no teaching concerning the outer surface of the sleeve 1. Instead, Köbler, et al. deal with the inner side of the sleeve 1, wherein a weld seam is provided as a guiding element for a groove in the form cylinder. Thus, Köbler, et al. provide absolutely no teaching concerning the outer surface of the sleeve, nor is there any suggestion for processing the outer surface of the weld seam, as in the presently claimed invention. Applicants wish to point out that it is not possible to undertake continuous printing with the printing form of

Köbler, et al. There is nothing in the teachings of Köbler, et al. which would suggest the modification of the outer surface of the weld seam as recited in the presently claimed invention. Furthermore, Köbler, et al. provide no teaching concerning a carrying sleeve in which the entire outer circumferential surface, including the weld seam, can be used for printing. Format variable continuous printing is not possible with the Köbler, et al. sleeve.

The patent to Fantoni, et al. contains absolutely no teaching concerning a weld seam. Instead, Fantoni, et al. teach a filler material 8. It is removed at the end of printing. This type of connection does not provide a sleeve which can be mounted by pressurized air onto a cylinder core. Furthermore, Fantoni, et al. do not teach a metal weld seam which has an outer surface that is processed so that the outer surface of the weld seam and the outer surface of the metal sheet together form a continuous outer circumferential surface for printing, as in the presently claimed invention. Furthermore, the filler material 8 of Fantoni, et al. does not form part of the printing region since it does not conform with the remaining photoreceptive layer 5. Thus, format variable endless printing with the sleeve of Fantoni, et al. is not possible. The purpose of the filler material 8 of Fantoni, et al. is only to prevent impact which would otherwise be caused by the channel. Fantoni, et al. thus do not teach a continuous printing as is dealt with in the presently claimed invention but only deal with or mention a continuous surface in connection with the avoidance of a channel or groove.

The patent to Johnson also only deals with a continuous surface in connection with a channel-free surface. Furthermore, Johnson provides absolutely no teaching concerning a carrying sleeve which can be expanded by pressurized air for placement on a printing cylinder, as in the presently claimed invention.

Tittgemeyer discloses a method and apparatus for printing with a lithographic sleeve. Tittgemeyer provides no teaching concerning a weld seam or the processing of a crown

portion of the weld seam to provide a continuous outer circumferential surface made up of the outer surface of the metal sheet and the weld seam so as to provide continuous printing with all regions of the outer surface including the weld seam, as in the presently claimed invention.

The Examiner correctly points out that Tittgemeyer discloses a sleeve shaped printing form that can be used for endless printing. However, Tittgemeyer does not teach forming the printing sleeve from a flat rectangular base plate by bending the base plate into a desired cylindrical form so that the two edges of the base plate face one another and can be welded together. The type of sleeve disclosed by Tittgemeyer is a relatively expensive sleeve produced by a galvanic process. The expense of such cylinders is indicated in the background portion of the reference.

The Examiner combined these references in rejecting independent claims 1 and 8, as well as forming the basis for the rejection of claims 12, 14, 16 and 17. Applicants respectfully submit that nothing in the teachings of these references suggests combining any of the teachings thereof to arrive at the presently claimed invention. Although the references individually show features which might appear similar to those of the presently claimed invention there is nothing in the teachings of these references or in the prior art in general which suggests the combination argued by the Examiner. The only way one skilled in the art would arrive at the presently claimed invention from the references relied upon by the Examiner is by impermissible hindsight reconstruction of the invention. The mere fact that the prior art could be modified in a particular way does not make that modification obvious unless the prior art suggested the desirability of the modification. *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

In view of the above considerations it is respectfully submitted that the rejection made by the Examiner is untenable in that there is no suggestion for the combination. The Examiner's statement in the advisory action that "applicants' argument still do not address the

motivation of the actual rejections made over the combined overall teachings of the prior art", is not understood and thus cannot be responded to. Applicants do not see how to "address the motivation of the actual rejections". It would appear that the Examiner should point out the motivation for making the rejections. It is the applicants' responsibility to argue that there is no motivation for making the combination proffered by the Examiner. As discussed above applicants submit that the references, as well as the prior art in general, provide no teaching for combining various bits and pieces from the numerous references cited by the Examiner to arrive at the presently claimed invention. As also discussed above, such a combination if at all possible could only be accomplished by having the present application as a road map.

**D. The Section 103 Rejections of The Remaining Claims**

Since the remaining dependent claims depend from the independent claims discussed above they share the presumably allowable features thereof. Therefore, the dependent claims are not taught by the various combinations of numerous additional references with the references discussed above.

**CONCLUSION**

In conclusion it is submitted that the Examiner's rejections of claims 1-17 under 35 USC 103 are erroneous and reversal of these rejections is respectfully requested.

This Appeal Brief is submitted in triplicate and enclosed herewith is a check in the amount of \$300.00 covering the required fee for filing the Appeal Brief. Any additional fees or charges in connection with this application may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,

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Dated: June 20, 2000

## APPENDIX

1. A metal carrying sleeve for continuous printing and transfer forms, the carrying sleeve consisting essentially of: a rectangular, thin-walled flat metal sheet, that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another; a metal weld seam that permanently connects together only the facing edges of the sheet so that the sheet is slidable onto a printing cylinder via pressurized air, the weld seam having an initial crowned configuration; and a homogeneous, continuous and uniform outer circumferential metal surface including the weld seam and formed by processing the surface and the crowned configuration of the weld seam so that one of format variable continuous printing is possible and a layer structure is placeable on the entire outer circumferential surface, including the weld seam.
2. A carrying sleeve as defined in claim 1, herein the thin-walled flat sheet is made of aluminum.
3. A carrying sleeve as defined in Claim 1, wherein the circumferential surface, including the seam, is chemically roughened and anodized, and further comprising a photosensitive coat on the roughened and anodized surface.
4. A carrying sleeve as defined in Claim 1 and further comprising a water-conducting coat on the outer surface, including the seam.

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5. A carrying sleeve as defined in Claim 1, and further comprising an engraved copper coat on the entire outer surface, including the seam.
6. A carrying sleeve as defined in Claim 1, and further comprising an endless rubber coat that covers the entire outer surface, including the seam.
7. A carrying sleeve as defined in Claim 1, wherein the carrying sleeve is configured to directly carry a flexible printing form for flexographic printing.
8. A process for producing a carrying sleeve for printing and transfer forms, which sleeve is slidable onto a printing cylinder by expansion by pressurized air, comprising the steps of: cutting a base plate from thin-walled sheet metal drawn from a roll and in a flat state to a size corresponding to a circumference and breadth of a printing cylinder;

bending the base plate into a desired cylindrical form so that two edges of the base plate face one another;

permanently connecting together the two edges of the base plate with a welded metal seam that has an outwardly directed crown and so that the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder; and

processing the crown and an outer surface of the sleeve to form a homogeneous, uniform continuous outer surface formed of the outer sleeve surface and the weld seam

so that format variable continuous printing is possible on the entire continuous outer surface.

9. A process as defined in Claim 8, wherein the step of connecting together the edges of the base plate includes forming the crown with welding filler materials.
10. A process as defined in Claim 8, wherein the step of permanently connecting the base plate edges includes forming the crown using targeted protective gas feeds.
11. A process as defined in Claim 8, wherein the step of permanently connecting base plate edges includes forming the crown by deposit welding following an initial welding of the base plate edges.
12. A process for producing an offset printing form, comprising the steps of:

producing a carrying sleeve for printing and transfer forms, which sleeve is slidable onto a printing cylinder by expansion with pressurized air, by cutting a base plate from thin-walled sheet metal drawn from a roll and in a flat state to a size corresponding to a circumference and breadth of a printing cylinder;

bending the base plate into a desired cylindrical form so that two edges of the base plate face one another;

permanently connecting together the two edges of the base plate with a welded metal seam that has an outwardly directed crown and so that the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder; and

processing the crown and an outer surface of the sleeve to form a homogeneous, continuous uniform outer surface formed of the outer sleeve surface and the weld seam, the processing step including chemically roughening and anodizing the hollow cylindrical form of the base plate and subsequently providing a photosensitive coating on the outer surface of the cylindrical form so as to create a printing form sleeve for format variable continuous printing.

13. A process as defined in Claim 12, wherein the base plate is made of aluminum.

14. A process for producing a gravure printing form, comprising the steps of:

producing a carrying sleeve for printing and transfer forms, which sleeve is slidable onto a printing cylinder by expansion with pressurized air, by cutting a base plate from thin-walled sheet metal drawn from a roll and in a flat state to a size corresponding to a circumference and breadth of a printing cylinder, bending the base plate into a desired cylindrical form so that two edges of the base plate face one another, permanently connecting together the two edges of the base plate with a welded metal seam that has an outwardly directed crown and so that the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder, processing the crown

and an outer surface of the sleeve to form a homogeneous, continuous uniform outer surface formed of the outer sleeve surface and the weld seam; and

applying a metal coat to the processed outer surface and then mechanically processing the metal coat.

15. A process as defined in Claim 14, wherein the step of applying a metal coat includes applying a copper alloy to the outer surface of the cylindrical form.

16. A process for producing a transfer form, comprising the steps of:

producing a carrying sleeve for printing and transfer forms, which sleeve is slidable onto a printing cylinder by expansion with pressurized air, by cutting a base plate from thin-walled sheet metal drawn from a roll and in a flat state to a size corresponding to a circumference and breadth of a printing cylinder, bending the base plate into a desired cylindrical form so that two edges of the base plate face one another, permanently connecting together the two edges of the base plate with a welded metal seam that has an outwardly directed crown and so that the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder, and processing the crown and an outer surface of the sleeve to form a homogeneous, continuous uniform outer surface formed of the outer sleeve surface and the weld seam; and

applying an endless rubber coating to the entire processed sleeve surface.

17. A process for producing a printing form, comprising the steps of:

producing a carrying sleeve for printing and transfer forms, which sleeve is slidable onto a printing cylinder by expansion with pressurized air, by cutting a base plate from thin-walled sheet metal drawn from a roll and in a flat state to a size corresponding to a circumference and breadth of a printing cylinder, bending the base plate into a desired cylindrical form so that two edges of the base plate face one another, permanently connecting together the two edges of the base plate with a welded metal seam that has an outwardly directed crown and so that the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder, and processing the crown and an outer surface of the sleeve to form a homogeneous, continuous uniform outer surface formed of the outer sleeve surface and the weld seam; and applying an endless ceramic coat to the entire processed sleeve surface.